

REMARKS

In response to the Official Action mailed February 4, 2004, Applicants respectfully request reconsideration. In this Response, no claims are added, canceled, or amended so that claims 1-39 remain pending. No new matter has been added.

The Official Action rejected claims 1-3, 5-8, 11-23, 26-27, 29-32, and 34-41 as anticipated by Collins (US Patent 6,173,075). Applicants presume the Official Action meant to say that claims 1-39 were rejected, as the highest numbered claim is 39 and no other rejection is provided for those claims not rejected. That rejection is respectfully traversed.

Collins is directed at a system and method for converting pixmap images into a set of points or vectors representing those images. By using vectors, the images require less memory, are more easily manipulated, and can be processed faster. By significant contrast, the present invention is directed at a system for method for rendering a warped brush stroke using a bitmap brush. This brush stroke tool may be used, for example, with a drawing tool for creating bitmap images.

To anticipate the rejected claims, a reference must teach every limitation recited by those claims. Collins fails to meet this stringent test. With regard to claims 1, 19, and 38, the Official Action contends that Collins teaches *determining a first segment in the bitmap brush corresponding to the first polygon on the guideline*, citing column 2, line 40 to column 3, line 17 for support. However, the cited text does not even contain the words “polygon” or “brush.” In fact, Collins makes no mention of a “bitmap brush” whatsoever throughout the entire patent. Nor would Collins even suggest such a brush, since Collin is directed at converting line art into a vector representation (see Abstract of Collins). Since the line art is already drawn, no bitmap brush is needed. Given that Collins does not teach a bitmap brush, the Official Action’s contention that Collins teaches determining a segment of a non-existing bitmap brush corresponding to a polygon is completely untenable.

The Official Action further contends that Collins teaches *applying a first transformation to a bitmap image mapped in the first segment in the bitmap brush to generate a corresponding bitmap image in the first polygon on the guideline*, citing column 4, line 2 to column 5, line 39 and Figs. 1a-2a for support. Applicants respectfully note that this contention is erroneous. Firstly, Collins does not teach applying a first transformation. The cited text of Collins describes converting a line art drawing into a vector representation (see column 4, lines 56-57 of Collins). However, a transformation is commonly known in the field of computer graphics as a mapping of one space onto another. This construction is further supported by the specification (see page 23, line 14 to

page 25, line 12 of the patent application). The conversion of line art into a set of vectors is not a transformation within the meaning allowed by the patent application. Secondly, even if Collins taught a transformation, it does not teach applying a transformation to generate a bitmap image in a polygon on a guideline. Collins uses vector polygons to represent a scanned line art image, but however fails to disclose generating a bitmap image inside the polygon by applying a transformation (see column 1, lines 40-59 of Collins). In fact, the purpose of the conversion in Collins is obviate the need for a bitmap or pixmap representation (see column 4, lines 56-62). Thus, it does not make sense that Collins would generate a bitmap image in a vector polygon.

The Official Action summarizes:

In other words, Collins teaches the line art polygons are then formed as a set of vector polygons, each polygon being formed around one unbroken. The result of this process is illustrated in Figure 1a, which shows a drawn "Y" digitized into a bitmap. Furthermore, Figure 2a discloses the strokes are formed. A stroke is a connected sequence of vectors (conventionally, line segments, which in some embodiments are thought of as having a direction, or equivalently, a sequence of points. A stroke that follows a line art boundary normally defines a contour loop, that is, a sequence of points (vectors) that loops back on itself, which illustrates the boundary contours, in the forms of polygons defining the inside and outside boundaries of line art.

Applicants agree with the Official Action's description of Collins; however, that is not what is claimed in the present application. The present application recites a correspondence between a segment in a bitmap brush, and applying a transformation to a bitmap image mapped to that segment of the brush to generate a bitmap image in a polygon, neither of which is taught by Collins.

Thus, Collins fails to teach every limitation of claims 1, 19, and 38. Accordingly, the rejection is erroneous and should be withdrawn.

Regarding claims 7-8 and 25-26, Collins fails to teach a bilinear transformation. Applicants do not understand what the Official Action meant by "the weighted average is the bilinear transformation step." A bilinear transformation is a mapping. Clearly, a weighted average is not a mapping, and thus cannot be construed as a bilinear transformation.

Regarding claims 9 and 27, the Official Action asserts, without support, that it "is inherent that cartoon animation comprises texture mapping." "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however,

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may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted). “In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.” *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). The Official Action has provided no reasoning to support its contention. Applicants submit that cartoon animation does not necessarily require the use of mathematic transformations such as texture mapping, therefore texture mapping is not inherent.

Thus, Collins fails to teach every limitation of claims 7-9 and 25-27. Accordingly, the rejection is erroneous and should be withdrawn.

Moreover, the rejection of claims 2-18, 20-37, and 39 is dependent upon the propriety of the rejection of claims 1, 19, and 38. Because those rejections are erroneous, the rejection of claims 2-18, 20-37, and 39 should also be withdrawn.

Reconsideration and withdrawal of the rejection are earnestly solicited.

Respectfully submitted,



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